

W. Compton,
Stringing Pianos,

N^o 9,988.

Patented, Sep. 6, 1853.

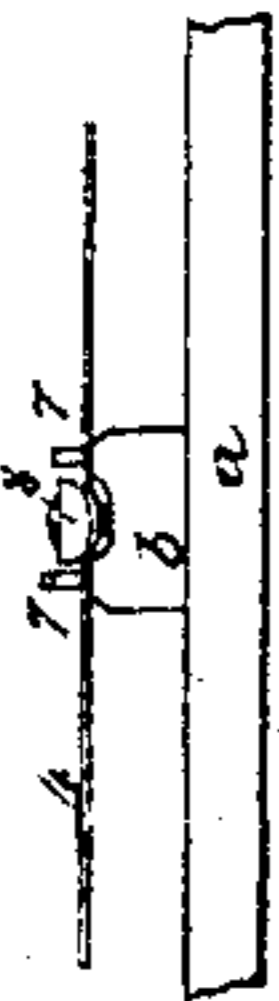


Fig. 2.

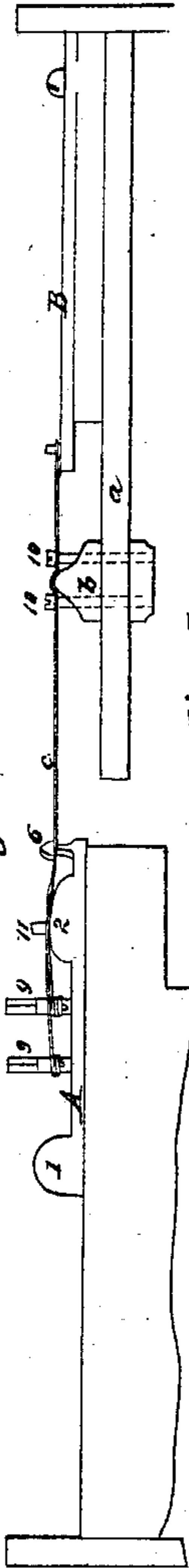
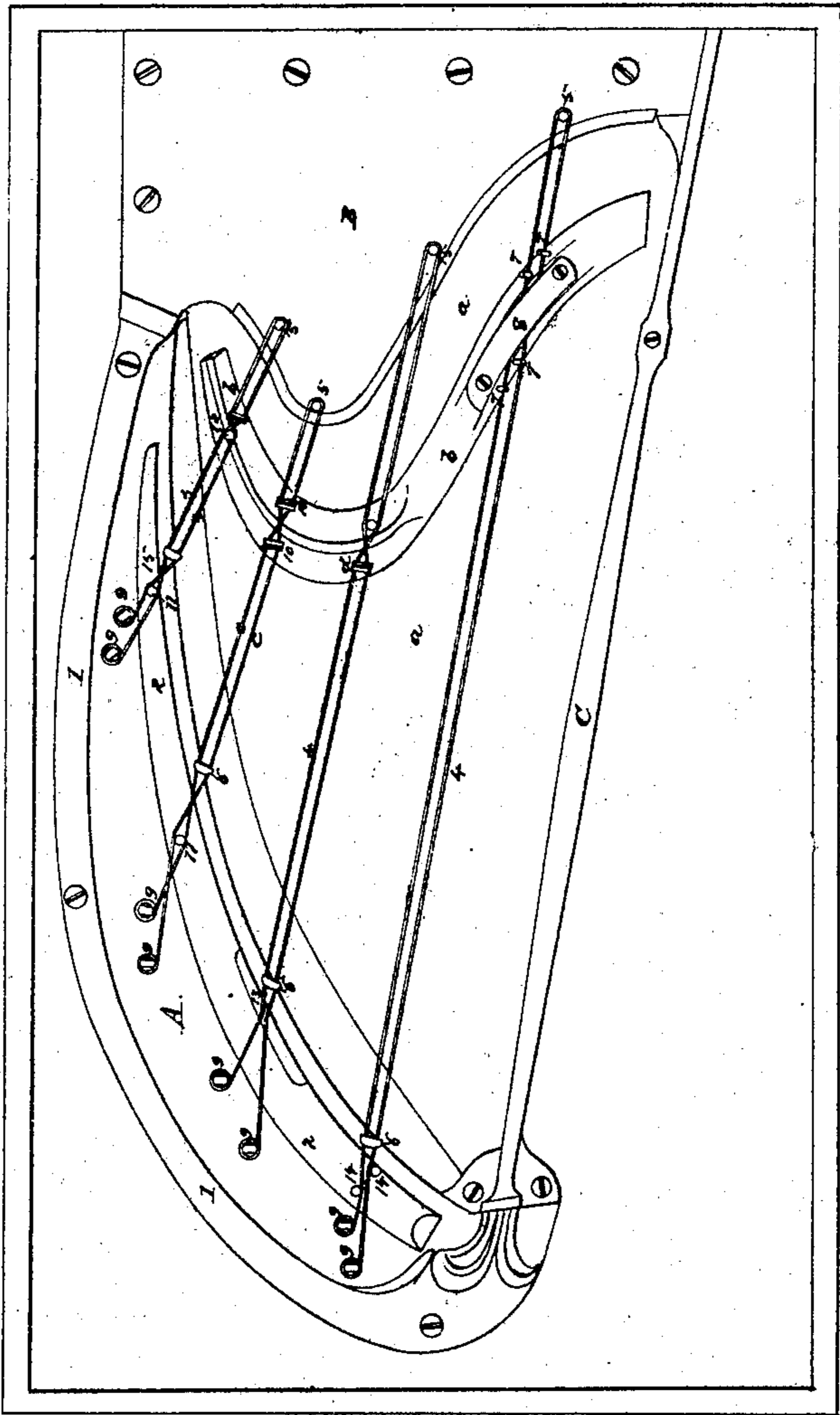


Fig. 7.



Witnesses:

Samuel W. Perrell.

Thos. G. Harvick.

Inventor

W^r Compton.

UNITED STATES PATENT OFFICE.

WM. COMPTON, OF NEW YORK, N. Y.

PIANOFORTE.

Specification of Letters Patent No. 9,988, dated September 6, 1853.

To all whom it may concern:

Be it known that I, WILLIAM COMPTON, of the city, county, and State of New York, pianoforte manufacturer, have invented, 5 made, and applied to use certain new and useful Improvements in Pianofortes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation thereof, reference 10 being had to the annexed drawing, making part of this specification, wherein—

Figure 1, is a plan representing the sounding board, rest plank and plate, with some of the strings in place, of an ordinary square 15 piano, although my invention can be equally well applied to either the vertical, or grand piano. The other figures are separately referred to, and the like marks of reference designate the same parts in all the figures.

20 A, is the rest plank which may be of any desired character, but I prefer the metal arch shown, 1, being the outer rib of said arch, and 2, the up bearing bridge or rest for the strings to pass over. B, is the bearing 25 plate to receive fixed pins for the ends of the strings, and C, is a brace or bar connecting the rest plank and bearing plate.

30 a, is the sounding board on which the curved bridge b, rests, that is of any suitable material, in the ordinary form to determine the length of the string.

The strings c, pass from the pin 5, over the bridge b, as hereafter shown, and beneath the top of the T, 6, rising slightly 35 over the rest or bridge 2, which binds them up against the horizontal part of the T, and to make them set closely against the vertical part of the T I cross said strings around a pin 11, whence they are again crossed to the 40 tuning pins 9.

10, 10, are T's one on each side of the highest part of the bridge b. These are 45 screwed or otherwise secured into the bridge and sounding board so that the under side of the T's are slightly lower than the higher part of the bridge between them, thus by crossing the strings as shown they are made to bind firmly into the angle both against the horizontal and vertical parts of the T 50 preventing all jingling, and by the lead of the strings being a straight line from the pins 5, to the T's 6, there is no horizontal strain and by reference to Fig. 2, which is a vertical section through the strings c, it will 55 be seen that the strings are to be on a straight line horizontally so that there is no

downward pressure on the sounding board, leaving that to vibrate more freely and without any strain to distress the same. The lead of the strings may be slightly 60 varied as next set forth, and although these variations produce nearly the same results, I prefer the arrangement shown as applied to the strings c, because the tuning pins correspond in position with the strings, and the 65 parts are easily fitted and tuned. The variation shown at 15, as applied to the strings 4, consists merely in the lead of the strings to the tuning pins; but in this the tuning pins are opposite the ends of the other 70 string of the note in consequence of only being crossed once; and the bridge b, is only fitted with one instead of two T's and a pin 12.

At d, the T is shown the other side of the 75 bridge to that at 12, with a pin instead of a T on the outer side, which in some cases may be used; and a groove or hole is shown at 13, in a projection above the rest 2, to cause these strings to bind against the sides 80 and top of the T, instead of crossing the strings around the pin 11; and 14, represents two pins on the rest 2, for the same purpose,—and in order to cause the strings to set firmly onto the bridge a double set of 85 pins may be used as at 7, with a curved bar 8, (see section Fig. 3) pressing the strings down, but at the same time they are to be straight horizontally to avoid distressing the bridge. These except the last, which I 90 do not claim are mere variations and changes that accomplish nearly the same objects as the first described arrangement which arrangement I prefer.

I am aware that arrangements have been 95 made in which the strings are drawn in a straight line to avoid horizontal strain on the sounding board and bridge; and I am aware that both an up and down bearing have been obtained for the strings by passing 100 them through holes or beneath T's and I am also aware that the strings have been crossed to obtain the right and left bearing but in this case the T's are below the horizontal line of the string thereby the power 105 required to keep the string up into the angle of the T is thrown on the sounding board to lift the same. I am not aware that an up bearing bridge or rest has been used with the T either at the rest plank or bridge, combined with the crossing or drawing the 110 strings together, thereby the string is held

more securely into the angle of the T, making the sound clearer and more brilliant, and the up bearing parts being connected to or formed with the down bearing parts
5 (the Ts) relieves the sounding board or rest plank of any strain tending to disturb their continuous proper action; therefore

What I claim is—

10 The means herein described and shown for securing the strings into the angles of the T's by the combined operation of the up bearing bridge or rest to which the T's are

connected, and crossing or drawing the strings together at said bridge or rest for the purpose of relieving the sounding board 15 or rest plank of vertical pressure as specified.

In testimony whereof I have hereunto set my signature this second day of June one thousand eight hundred and fifty three.

WM. COMPTON.

Witnesses:

LEMUEL W. TERRELL,
THOMAS G. HAROLD.